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GEOGRAPHIC INTELLIGENCE MEMORANDUM

SELECTED EDIBLE WILD PLANTS OF PAKISTAN NORTH OF LAHORE,
INCLUDING PAKISTAN-HELD JAMMU-KASHMIR

CIA/RR-G/I-203
October 1956

CENTRAL INTELLIGENCE AGENCY

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SELECTED EDIBLE WILD PLANTS OF PAKISTAN NORTH OF LAHORE,
INCLUDING PAKISTAN-HELD JAMMU-KASHMIR

Introduction and Bibliography

The following list of edible wild plants, compiled from several botanical sources, serves to illustrate the kinds of wild plant foods that are available in northern Pakistan and Pakistan held Jammu-Kashmir. After the botanical name the common name is given parenthetically in English or romanized Urdu. In many cases, plants have two or more common names in Urdu.

Five wild plants used for medicinal purposes in common ailments of the area are listed separately on the last page.

Information on additional edible plants and more detailed information on the plants recommended in this paper can be obtained from the books cited in the following bibliography:

1. Hooker, J.D., Flora of British India, 7 volumes, London, 1882. The most detailed work available on the flora of the area.
2. Bamber, C.J., Plants of the Punjab - A Descriptive Key to the Flora of the Punjab, North-West Frontier Province and Kashmir, Lahore, 1916. One volume; gives detailed listing and descriptions; no illustrations.
3. Duthie, J.F., Field and Garden Crops of the North-Western Provinces and Oudh. Parts II and III, Roorkee, India, 1893.

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Two volumes; include page-size pencil illustrations of many cultivated plants related to wild plants of the NWFP.

4. Atkinson, E.T., Notes on the Economic Products of the North-Western Provinces, Part V, Allahabad, India, 1881. Indicates flowering or fruiting season of many plants having edible fruit.
5. Duthie, J.F., "Report on a Botanical Tour of Kashmir," Records of the Botanical Survey of India, Vol. I, No. 3, 1894. Gives some information on elevation ranges of various plants having edible parts.
6. Bor, N.L., Manual of Indian Forest Botany, Oxford University Press, 1953. Gives useful information on edible parts of various trees.
7. Imperial Gazetteer of India, The Indian Empire, Vol. I, Oxford, 1909. Section on Botany gives valuable background material on altitudinal zones within the mountain areas.
8. Spate, O.H.K., India and Pakistan, E.P. Dutton and Company, Inc., New York, 1954. Locates and defines places mentioned in this listing.

LIST OF SELECTED EDIBLE WILD PLANTS OF PAKISTAN
NORTH OF LAHORE, INCLUDING PAKISTAN-CHINA JAWAJ-KASHMIR

a. Trees

<u>Family</u>	<u>Botanical and Common Name*</u>	<u>Use</u>	<u>Distribution</u>
Amacardiaceae	Rhus semi-alata (tekri, tiri, dudla)	Fruit edible; 1/4" in diameter; woolly, red-brown, acid drupe	Himalayas from 3,000 to 7,000 feet elevation
Boraginaceae	Cordia vestita (kumbi)	Fruit edible; 3/4" long, oblong, sharp-pointed	Himalayas from 1,000 to 4,000 feet
Coniferae	Pinus gerardiana (miri, galgoja)	Seeds edible when roasted; 1" long, cylindric, short wings (Seed called <u>chilgoza</u> or <u>neozza</u>)	Himalayas; dry inner valleys from 6,000 to 12,000 feet Kurram Valley from 7,000 to 11,000 feet
Cornaceae	Cornus capitata (strawberry tree, tharwar, thesi)	Strawberry-like fruit edible	Himalayas from 4,000 to 7,000 feet
Ebenaceae	Diospyros lotus (anlok)	Fruit edible; dark purple, round or ovid, sweet	West Punjab (Hazara) from 3,000 to 6,000 feet
Euphorbiaceae	Antidesma chinensis (unice)	Fruit edible; 1/6" in diameter, red to black	Himalayas
Euphorbiaceae	Bridelia retusa (pathor, mark)	Purple-black fruit edible; 1/4" in diameter	Himalayas from 2,000 to 3,500 feet

*Common names given in parentheses when known.

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<u>Family</u>	<u>Botanical and Common Name</u>	<u>Use</u>	<u>Distribution</u>
Geraniaceae	Averrhoa carambola (karambola)	Fruit edible; yellow, fleshy, 3" long, oblong	Indus Plain
Leguminosae	Pithecolobium dulce (vilepati imli)	Sweet, edible seeds in 4"-5" twisted pod	Indus Plain
Leguminosae	Prosopis spicijera (jand)	Seeds edible; in 5"-10" pods	Indus Plain
Myrtaceae	Psidium guajava (guava)	Succulent fruit edible raw or cooked; rough skinned, 2-3-1/2" in diameter	Indus Plain up to 5,000 feet
Rhamnaceae	Hovenia dulcis (chamun, sticka)	Fruit stalk edible; enlarges; becomes fleshy and tastes like a pear	Himalayas from 3,000 to 6,500 feet
Rosaceae	Prunus amygdalus (almond, badam)	Seed (nut) edible; within 1-1/2" velvety drupe	Indus Plain to 10,000 feet
Rosaceae	Prunus armeniaca (apricot, zurdalu)	Yellow or black drupe edible; 1-1/2" long, velvety or nearly smooth	Indus Himalayas to 11,000 feet
Rosaceae	Prunus persica (peach, aru)	Fruit edible	Indus Plain to 10,000 feet
Rosaceae	Prunus cerasus (wild cherry, gilas, olchi)	Round, smooth fruit edible; 1/4"-1/2" diameter	Himalayas to 10,000 feet

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<u>Family</u>	<u>Botanical and Common Name</u>	<u>Use</u>	<u>Distribution</u>
Rosaceae	<i>Pyrus coccinervis</i> (pear, nashpetti)	Fruit edible	Himalayas from 2,000 to 8,000 feet
Rosaceae	<i>Pyrus malus</i> (apple, seo)	Fruit edible	Indus Plain to 9,000 feet
Rutaceae	<i>Feronia elephantum</i> (elephant or wood apple, bilth, kat-bel)	Fruit edible; round, grey, 2-1/2" in diameter, woody rind. Useful to stop dysentery	Indus Plain to 1,500 feet
Sapindaceae	<i>Schleichera trijuga</i> (lac tree, gosum, kussumb, samma)	Pleasant acid-flavored seeds edible; 1 or 2 in a pulpy fruit	Indus Plain
Urticaceae	<i>Grewia vestita</i> (phalsa, daman)	Nuts edible; enclosed in drupe	Salt Range up to 4,000 feet
Urticaceae	<i>Ficus roxburghii</i> (urbel, tembel)	Top-shaped fruit edible; 2" diameter, russet colored	Himalayas to 5,000 feet
Rosaceae	<i>Rubus ellipticus</i> (lal anchhu)	Golden-yellow fruit edible; has pleasant flavor like raspberry	Himalayas from 2,000 to 7,000 feet
Rosaceae	<i>Rubus fruticosus</i> (blackberry, alish)	Black fruit edible	Himalayas west of the Chenab River
Rosaceae	<i>Rubus macilentus</i>	Drupe edible; 20-30 grow on a columnar velvety receptacle of a prickly, trailing shrub	Himalayas and Hazara from 4,000 to 6,000 feet

b. Shrubs

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c. Herbs

<u>Family</u>	<u>Botanical and Common Name</u>	<u>Use</u>	<u>Distribution</u>
Araceae or Aroidaeae	<i>Amorphophallus campanulatus</i> (jangli-saran)	Tuberous root edible; called <u>zamin kund</u> in Urdu	Indus Plain
Asclepiadaceae	<i>Caralluma edulis</i> (chang, pipra, sitru)	Small succulent plant cooked and eaten as a vegetable by the poor	Indus Plain
Campanulaceae	<i>Codonopsis ovata</i> (ludut)	Root edible; small plant with sky blue flowers on long terminal stalk	Himalayas from 8,000 to 12,000 feet; Kashmir
Comelinaceae	<i>Comelina obliqua</i> (kanjura, kana)	Root edible; reduces fevers	Himalayas from 1,000 to 6,000 feet
Compositae	<i>Cousinia minuta</i> (lakhtel, kandlari)	Young plants eaten as vegetable	Indus Plain west of the Jhelum River
Compositae	<i>Sonchus oleraceus</i> (sow thistle, dodak)	Prickly leaves eaten as a vegetable, probably cooked	Indus Plain to 8,000 feet
Convolvulaceae	<i>Convolvulus pluricaulis</i> (porprang, dodak)	Leaves used as greens	Indus Plain to 3,000 feet
Crociaceae	<i>Lepidium sativum</i> (garden cress, belim)	Leaves eaten raw; small annual plant with small white flowers	Indus Plain to 9,000 feet
Labiatae	<i>Perilla octinoides</i> (bhanjira)	Butlets and leaves edible; grow on medium sized, aromatic plant	Himalayas from 2,000 to 5,000 feet
Labiatae	<i>Scutellaria linearis</i> (mastlari)	Bitter plant edible	Himalayas from 3,000 to 8,000 feet; also Kashmir and Salt Range

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<u>Family</u>	<u>Botanical and Common Name</u>	<u>Use</u>	<u>Distribution</u>
Leguminosae	Cassia tora (panwar, chakunda)	Seeds used as substitute for coffee; 30-35 in 8"-10" pod, nearly cylindrical; grow on large shrublike weed	Indus Plain to 5,000 feet
Leguminosae	Indigofera tinctoria (toril)	Seeds eaten as bread in times of famine	Indus Plain
Leguminosae	Phaseolus trilobus (mungani)	Seeds used as food by poor people; 6-12 in a pod	Indus Plain to 7,000 feet
Lilaceae	Polygonatum verticillatum (whorled Solomon's seal, mittha audia, shekakal)	Root eaten as food in Kurram Valley	Himalayas, 6-11,000 feet
Lilaceae	Tulipa chrysantha	Bulbs edible	Indus Plain, Salt Range
Malvaceae	Hibiscus sabdariffa (rozelle or red sorrel, petra)	Acid jelly is prepared from edible calyx. Used as scurvy preventive	Indus Plain
Myrtaceae	Berberis elegans (sant)	Seeds edible; 1/10" long, narrowly oblong; grow on large, shrubby plant	Indus Plain
Phytolaccaceae	Phytolacca acinosa (hubar, rinsag)	Leaves edible when cooked; poisonous when uncooked	Himalayas from 4,000 to 9,000 feet
Polygonaceae	Polygonum alpinum	New stalks eaten raw or cooked; taste like rhubarb	Himalayas from 7,000 to 12,000 feet
Polygonaceae	Polygonum rumicifolium	Young parts eaten as rhubarb	Kashmir from 10,000 to 14,000 feet

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<u>Family</u>	<u>Botanical and Common Name</u>	<u>Use</u>	<u>Distribution</u>
Polygonaceae	Polygonum sibiricum	New growth eaten, probably cooked	Himalayas at 11,000 to 12,000 feet
Polygonaceae	Rumex nepalensis (dock)	Roots used as substitute for rhubarb	Himalayas from 4,000 to 9,000 feet
Rosaceae	Fragaria vesca (wild strawberry, kangers, taval)	Fruit edible	Himalayas from 5,000 to 8,000 feet
Umbelliferae	Poeniculum vulgare (fennel, saunf)	Leaves eaten as herb	Indus Plain to 6,000 feet
d. <u>Climbing Plants</u>			
Asclepiadaceae	Pentstemon spiralis (ambar vel, vanveri)	Roots edible	Indus Plain
Cucurbitaceae	Luffa aegyptiaca (ghia-tori)	Club-shaped fruit 5"-12" long is eaten when young	Indus Plain to 3,000 feet
Cucurbitaceae	Momordica dioica	Tuberous root cooked as vegetable	Indus Plain to 5,000 feet
Cucurbitaceae	Tricosanthes cucumerina	Fruit eaten as vegetable	Indus Plain
Leguminosae	Bauhinia vahlii (melgham, malu)	Seeds edible when roasted; 8-12 in pods 1" in diameter and 6-18" long	Himalayas from 2,000 to 4,000 feet
Rhamnaceae	Sageretia theezans (dargola, ankol)	Fruit edible; sweet, dark brown, round; 1/4" in diameter	Himalayas from 6,000 to 8,000 feet; also Salt and Sulaiman Ranges and Hazara

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e. <u>Water Plants</u>			
<u>Family</u>	<u>Botanical and Common Name</u>	<u>Use</u>	<u>Distribution</u>
Convolvulaceae	<i>Ipomaea aquatica</i> (ganthian, narl)	Leaves edible	Indus Plain
Cruciferae	<i>Nasturtium officinale</i> (common watercress, piriya)	Plant edible	Indus Plain to 7,000 feet; Kashmir
Nymphaeaceae	<i>Euryale ferox</i> (gorgon fruit, makhana, jesar)	Seeds edible when roasted; thick skinned, black, pea-sized; plant large leafed	Kashmir
Nymphaeaceae	<i>Nymphaea lotus</i> (chota kenwal)	Root is often eaten	Indus Plain
Nymphaeaceae	<i>Nelumbium speciosum</i> (sacred lotus, Egyptian bean, kanwal, pamposh)	Rootstock edible	Indus Plain to 6,000 feet; Kashmir
Nymphaeaceae	<i>Nymphaea stellata</i> (bambar, nilpadma)	Root and seeds often eaten	Indus Plain
Typhaceae	<i>Typha angustata</i> (lesser cat's tail, patira, kandar, pitz)	Young shoots and roots edible	Indus Plain to 5,000 feet; Kashmir
Gnetaeae	<i>Ephedra pachyclada</i>	Fruit edible	Himalayas from 7,000 to 15,500 feet

f. Leafless Plants

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<u>Family</u>	<u>Botanical and Common Name</u>	<u>Use</u>	<u>Distribution</u>
Gnetaceae	Ephedra vulgaris	Fruit edible; 1/4" long, ovoid, pink or red, sweet; small plant with stiff, slender green branches	Himalayas from 7,000 to 12,000 feet
g. <u>Medicinal Plants</u>			
Apocynaceae	Holarrhena antidysenterica (kura)	Powdered bark used as a cure for chronic dysentery	Himalayas up to 3,500 feet
Commelinaceae	Commelina obliqua	Reduces fevers	Himalayas from 1,000 to 6,000 feet
Compositae	Artemisia maritima (worm seed)	Flower heads used as anthelmintics	Himalayas from 7,000 to 9,000 feet
Malvaceae	Hibiscus sabdariffa	Used as scurvy preventive	Indus Plain
Rutaceae	Feronia elephantum	Useful to stop dysentery	Indus Plain to 1,500 feet

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